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Identification and Qualifications

Identification

Jacobs Civil Inc. is the prime firm for this project. We have a long history in Indiana, and the responsible office from which the work will be performed is:

1099 North Meridian, Suite 500 Indianapolis, Indiana 46204

Brynne Smith is Vice President of our Central Region operations and is our contact person authorized to negotiate for this work. His email address is brynne.smith@jacobs.com, and as an officer of the company, his required signature is provided.



Brynne E. Smith, Vice President Operations - Central Region

Design Liability and Financial Capability/Insurance

The Submitting Firm, Jacobs Civil Inc. ("Jacobs") is a subsidiary of Jacobs Engineering Group Inc., a publicly-traded organization comprised of many operating companies and affiliates, having a total current employment complement of more than 40,000 persons and revenues exceeding \$6 billion. Jacobs will provide certificates of insurance evidencing Worker Compensation, Comprehensive General and Automobile Liability insurance coverage. Jacobs prefers to self-insure its professional liabilities, as has sufficient assets to cover such potential liabilities under any resulting contract.

Qualifications

Our Team

We have teamed with qualified local and specialty firms, each Indiana DOT-prequalified in their proposed disciplines/roles. Figure 1 identifies our team members, their project roles, DBE/MBE/WBE status, and the percentage of work they will perform on this project.

Figure 1 - Team Member Firms and Roles

Team Member	Project Role	DBE/MBE/ WBE Status	
Jacobs Civil Inc.	Overall project management; 5.1 Environmental Document Preparation–EA; 5.5 Wetland Mitigation; 5.6 Waterway Permits; 5.8 Noise Analysis and Abatement Design; 8.2 Complex Road Design; 9.2 Major Bridge Level 2	N/A	64.0%
ASC Group, Inc.	5.4 Ecological Surveys; 5.9 Archaeological Investigations; 5.10 History/Architectural Investigations	DBE/WBE	11.2%
Booth & Associates, LLC	12.2 Title Research; 12.6 Negotiations; 12.7 Closing	MBE/DBE	3.4%
DLZ Indiana LLC	6.1 Topographic Survey Data Collection; 10.1 Traffic Signal Design; 10.2 Traffic Signal System Design; 10.3 Complex Roadway Sign Design; 10.4 Lighting Design; 11.1 Right-of-way Plan Development	N/A	14.1%
Robert Neal Sanders	12.1 Project Management for ROW Acquisition Services; 12.3 Value Analysis; 12.4 Appraisal	N/A	5.1%
Stankoven and Company, Inc.	12.8 Relocation	N/A	2.2%

Budget and Schedule

We have successfully completed similar type projects on budget and within schedule. Figure 2 identifies projects and client references for the major categories on your project.

Figure 2 - Similar Projects and Client References

Major Category/ Projects	Client Name / Contact Information	On Time	Within Budget
Environmental Assessment			<u>, , , , , , , , , , , , , , , , , , , </u>
I-69 Tier 2 EIS, Sec. 2 – Gibson, Pike, and Daviess Counties, IN	Hannum, Wagle & Cline Engineering, Mr. Randy Hancock, P.E., Transportation Division Manager, 812.752.0914	,	1
U.S. 24 Preliminary Development Study, Napoleon to Toledo, OH	Ohio Department of Transportation, Mr. Mike Ligibel, Planning and Programs Administrator, 419.373.4457	J	,
Interchange Access Justification			
 i-170/i-270 Interchange Improvements, St. Louis County, MO 	Missouri Department of Transportation, Mr. Bill Schnell, P.E., Area Engineer, 314.340.4305	1	✓

0607-STL-P0106 I **JACOBS**

 I-44/US 65 Interchange, Springfield, MO 	Missouri Department of Transportation, Ms. Linda Bokel, P.E., Project Manager, 417.895.7698	1	V
Design/ROW			
Route 5 Relocation (Segment from Niangua Arm to South of Camdenton), Camden County, MO	Missouri Department of Transportation, Mr. Roger Schwartze, District Engineer, 573.751.3322	1	1
* I-70 over New Florissant Road, St. Louis County, MO	Missouri Department of Transportation, Mr. Shyam Gupta, Division Engineer, Bridge, 573,751,4676	1	1

When selecting the right team to deliver your project, a determining factor is the caliber and performance of proposed key staff. The following pages highlight some of the relevant experience for our project manager. This brief resume is followed by Figure 3, which encapsulates the qualifications of our supporting team members.

Bruce A. Dinkheller, P.E. Project Manager

Education

B.S., Civil Engineering, University of Illinois at Chicago B.S., Civil Engineering Technologies, SIU-Carbondale

Registrations/Certifications

Professional Engineer - Illinois and Wisconsin

Professional Affiliations/Awards

- Outstanding Service Award, Illinois Department of Transportation, 2000
- Illinois Department of Transportation committees:
- Project Management Training Committee, ACEC
- Materials QC/QA Development Team
- Project Procedures Guide
- Standard Specifications Committee
- * Industry Joint Co-op
- Chair of Illinois Department of Transportation and Illinois Road and Transportation Builders Association, IRTBA Liaison Committee

Bruce brings valuable insight from 27 years in key roles with the Illinois Department of Transportation (DOT) to his role as project manager. His experience includes project management roles, including the General Engineering Consultant agreement with the Illinois Tollway, and design of I-90/94 Kingery-Borman Expressway for the Illinois DOT. Bruce's Illinois DOT positions included:

- District Engineer
- Engineer of Project Implementation
- Materials Engineer
- Consultant Services Project Manager

Project Experience

General Engineering Consultant, Illinois State Toll Highway Authority, Various Locations. *Project Manager* for providing broad-based engineering services and assisting the Tollway in administering their annual capital program. Provided oversight and administration of consultant contracts on behalf of the Illinois Tollway. Developed the Tollway's \$5.3-billion Congestion Relief Program (multiyear capital plan), including representing Tollway Engineering at public meetings required for

proposed toll increase. Served in several Deputy Program Manager (DPM) positions, including construction, operations, and master planning. Served as liaison on the standing Specifications Committee between Illinois DOT and the Illinois Tollway. Provided leadership in converting Tollway specifications, standards, and pay items to Illinois DOT specifications and standards. Acted as DPM of Construction, DPM of Operations, and DPM of Master Planning.

Illinois Department of Transportation, Various Locations.

District 8 – District Engineer responsible for all infrastructure projects in the ten Illinois/Metro St. Louis counties in southwest Illinois. The annual capital budget was over \$200 million.

- Planning and design of \$1.6-billion New Mississippi River Crossing
- * IL 158 Outer Belt Corridor Study
- * Reconstruction of IL 159

District 1 – Engineer of Operations for all maintenance, traffic, and electrical operations in the Chicago metropolitan area with over 900 Illinois DOT employees.

Engineer of Project Implementation managing the bureaus of Construction, Materials, Local Roads, and EEO/Labor Compliance Section with over 400 staff. Key projects:

- Reconstruction of I-55, Stevenson Expressway, \$567 million
- I-290 from I-294 to 1st Avenue, Hillside Interchange, \$140 million
- * I-90/94, Dan Ryan Expressway emergency resurfacing
- Wacker Drive reconstruction

Bureau Chief of Materials Consultant Services Project Manager involving contract negotiations and managing plan preparation, scheduling, and engineering review of 60 simultaneous consultant pre-pared designs totaling \$1.6 billion. Projects included:

- Design completion of the I-90/94 Kennedy Expressway, \$450 million
- I-55 Stevenson Expressway design plans, \$567 million
- Planning for I-355 south extension
- * IL 64, North Avenue, \$100 million

Figure 3 – Project Personnel

Figure 3 – Project Personnel		
Name and Role	Education/Years of Experience	Certifications/Registrations
John McCarthy (Jacobs) 5.1 Environmental Document Preparation—EA	Master, Urban Planning BS, Economics Years: 36	American Institute of Certified Planners; State of Missouri Planner-in-Charge Certification; Registere Professional Community Planner; MI: Professional
New Mississippi River Crossing, Illinois D and environmental documentation to restr bridge. Work involved location/design student and Section 106 and archaeological evaluation approved by FHWA. I-70 Tier 2 EIS, Section 7, Missouri DOT, archeological compliance issues for wider Lars Carlson (Jacobs)	OT, St. Louis, MO. Led the 9-year Phase I pla ructure St. Louis core-area interstate highway dies, conducting public meetings, MIS, corrido	anning, conceptual engineering, community involvement, network, including relocating I-70 on a new eight-lane or protection, Draft and Final EIS /Section 4(f) statements ports, and Record of Decision. The FEIS and ROD
5.5 Wetland Mitigation5.6 Waterway Permits	Ecology BS, Biology Years: 22	Certification Training; Society of Wetland Scientists Professional Wetland Scientist Certificate; Ecologica Society of America Certified Senior Ecologist
and functions and values assessment usin US 24, Ohio DOT, Toledo and Napoleon, of million corridor location study. Responsible US 33, Athens to Darwin EIS, Ohio Depart services and the EIS for this four-lane high	g Indiana Wetlands Rapid Assessment Protoco DH. Wetlands Scientist/Project Ecologist for a	study for upgrading a 25-mile segment involving a \$4.6 logical sections of the EIS.
Landon McKinney (ASC Group, Inc.) 5.4 Ecological Surveys	MS and BS, Biology Years: 25	USCOE Wetland Delineation and Management Training Program: Environmental Compliance Training
 Resources Conservation Service C Rapid Assessment Protocol Testing and Ev MOA Level Ecological Survey, Hamilton and Ali Kazmi (Jacobs) 	ontract, riffee real contract for Wetland Sun raluation, Lake and Porter Counties, IN. d Butler Counties, OH.	
5.8 Noise Analysis and Abatement Design 1-69 Tier 2 EIS, Section 2, INDOT, Gibson, levels, developing calibration runs for existir traffic noise report including mitigation recor 1-70 Tier 2 EIS, Section 7, Missouri DOT, M. preliminary noise analysis, monitoring existis supporting Second Tier Environmental Impa US 24 Preliminary Development Study, Nap conducting QC for preliminary noise analysis or corridor near Toledo. Traffic noise analysis or second traff	mmendations. Conducting preliminary noise are mmendations. Traffic noise analysis was performed ontgomery, Warren and St. Charles Counties, ing ambient noise levels, and writing traffic noise Statement for improvements along a 35-microleon to Toledo, Ohio DOT, Henry and Lucas s. and traffic noise report as part of the environments.	Professional Engineer: TX Analyst in charge of monitoring existing ambient noise nalysis for proposed I-69 corridor Segment 2, and writing primed with FHWA's Traffic Noise Model software. MO. Traffic Noise Analyst in charge of conducting se report including mitigation recommendations, ile corridor of I-70. Counties, OH. Traffic Noise Analyst in charge of nimental documentation for a 25-mile segment of
evin Schwarz (ASC Group) 9 Archaeological Investigations Over 14 years of fieldwork experience in all a	PhD, RPA Years: 15 aspects of prehistoric archaeological support	Asting everyation and many is
Ohio River Bridge project.	DOT projects, including the Kokomo Bypass, I	esurig, excavation and mapping. -69, Sections 1-2, and the Louisville-Southern Indiana
ouglas Terpstra (ASC Group) 10 History/Architectural Investigations Conducted history/architecture surveys for p	MS Years: 6 roposed Route 31 bypass around Kokomo an	d Section 2 of the proposed I-69 corridor in Gibson,
		projects ranging from small bridge replacements to
m Lietzan (DLZ Indiana LLC) 1 Topographic Survey Data Collection Over 30 years of experience in land surveyin	BS, Geology Years: 30	Registered Land Surveyor: IN
Open-End Right-of-Way Services, Indiana Do to INDOT standards, including field staking for	OT. Preparation of route survey plats, parcol r	olats, legal descriptions and supporting documentation

Figure 3 - Project Personnel

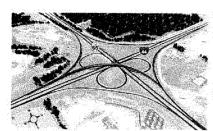
Figure 3 – Project Personnel		
Name and Role	Education/Years of Experien	ce Certifications/Registrations
services/survey for acquisition of 230 parcels I-69 Rehabilitation, Allen County, IN.		Toll Highway Authority. QA-QC for right-of-way engineering
U.S. 30 and Burr Street, Lake County, IN.	$i_{i_1,i_2,i_3} = i_{i_1,i_2,i_3} + i_{i_1,i_2$	
Andrew Frey (Jacobs) 8.2 Complex Road Design	MS and BS, Civil Engineering Years: 18	Professional Engineer: MO, IL, OH
setting alignments for preliminary phase geor 20 service roads. Responsible for modeling a I-44/US 65 Interchange, Missouri DOT, Sprin QA/QC of all roadway elements for reconstrudrainage. Preliminary and final design compl seven retaining walls and preliminary design I-170/I-270 Interchange, Missouri DOT, St. L a nearby diamond interchange. Responsibilitie earthwork, and establishing locations of 16 re Stephen Yordy (Jacobs)	metrics of the mainline, three connector all roadways, setting preliminary ditch progfield, MO. Lead Highway Engineer resuction and realignment of a directional in eted in 10 months. Coordinated all road of three additional ramps. Ouis County, MO. Lead Highway Engine ites included preliminary and final interchetaining walls. Provided overall coordinal MS and BS, Civil Engineering	opment of the 25-mile-long relocation. Responsible for roads, two diamond interchanges, 12 cross roads, and over offiles, and calculating earthwork. sponsible for oversight of final interchange geometrics and interchange, including bridges, retaining walls, roadway, and laway design including final design of US 65, five ramps, and ever for directional interchange and three of the four ramps of the geometrics, modeling all roadways and calculating attornoof geometric design and quality control procedures. Professional Engineer: IN, MO, KS, OH, TX, NC, V.
9.2 Major Bridge Level 2	Years: 32	
services for relocating 5.7 miles of 4-lane urb facilities. Bridges vary from three to seven speake Parallel Crossing of Chesapeake Bay, CBBT comprehensive construction management of several thousand feet of causeway, 3.5 miles lighting, a new fiber optic communication net Poplar Street Bridge Approach Complex, Illin portions of the rehabilitation, widening, and n distributors and ramps of the approach comp development, originate and check superstruct Qasim Asghar (DLZ Indiana LLC) 10.1 Traffic Signal Design; 10.2 Traffic Signal System Design; 10.3 Complex Roadway Sign Design	Madison Counties, IL. Deputy Project Monan expressway with variable median. In plans, carrying two or three lanes of traffic District, Virginia Beach, VA. Structural of the 17½-mile parallel crossing of Chesas of 2-lane at-grade roadway construction work, and rehabilitation of the existing facility of the existing facil	anager and Structural Group Leader for Phase II engineering all leading structures over raction and the structures over raction. Group Leader for design and project manager for apeake Bay. Included are 12 miles of two-lane trestle spans on, reconstruction and widening of two toll plazas, roadway accility. In ager, Structural Group Leader/Structural Engineer for elevated highway structures for mainline roadways, collectont, condition inspections, report preparation/review, criteria
calculations. SR 331, South Bend, IN. Project Engineer re	sponsible for signing and signal design.	e for signal design, pavement markings and quantity
Phase I – SR 56, Orange County, IN. Project	t Engineer responsible for signing and p	pavement markings.
David Tepen <i>(DLZ Indiana LLC)</i> 10.4 Lighting Design	BS, Electrical Engineering Years: 15	Professional Engineer: IN
	ne national electrical code, national elec nting, INDOT standards and specificatio	trical safety code, the AASHTO Guide for Roadway Lighting ons and utility clearance requirements.
Brian Woodrow (DLZ Indiana LLC) 11.1 Right-of-way Plan Development	BS, Civil Engineering Years: 25	Professional Engineer: IN, MI, OH, IL Surveyor in Training: IN
preparation and calculations as well as performs SR 2, Porter, IN; SR 135, Harrison/Washing	ming peer reviews. gton Counties, IN; SR 135, Washington N Shelby County; SR 13, Madison Cou	tion of legal descriptions, right of way parcel plats, plan County, IN; CR 1000E, Noble County, IN; Greensboro Pike inty, IN; SR 69, Posey County, IN; SR 43, Tippecanoe
Robert Neal Sanders 12.1 Project Management of Right-of-Way Acquisition Services; 12.3 Value Analysis; 12.4 Appraisal	BA Years: 14	Indiana Certified General Appraiser CG69200986 Indiana Real Estate Broker IB58705337 INDOT Approved Appraiser/Reviewer INDOT Approved Acquisition Agent/Buyer
 Appraised and reviewed numerous projects v 	tion Assistance and Real Property Acqu	ent right-of-way management projects. Brings practical and uisitions for federal and federally-assisted programs, the

Figure 3 – Project Personnel		
Name and Role	Education/Years of Experience	Certifications/Registrations
US 31 South Johnson/Marion County I-69 Extension SW Highway US 31 Study Plymouth to South Bend	SR 3 Rush County Bridge No. 90 Henry County	East 38th Street Salem to Fall Creek Blvd East 38th Street & Franklin Road
Tamara Brown (Booth & Associates, LLC) 12.2 Title Research; 12.7 Closing	BA, Political Science/International Relations	Attorney: IN Indiana Dept. of Insurance – Title Insurance
Evaluate title documentation, such as deeds evident from the title search. Chief Legal Counsel, Indiana Bureau of Mot Negotiated, drafted and reviewed comme Negotiated, drafted and reviewed contract	or Vehicles rcial real estate contracts for license branct	
Milton Booth (Booth & Associates, LLC) 12.6 Negotiation	BS Years: 32	Licensed Certified Residential Appraiser CR 69201443
tan <u>Company</u> Company and American		Licensed Broker- State of Indiana IB 51324798
US #20-St. Joseph County	State Road #48-Monroe County	US #40 Vigo/Clay County
Margie Stankoven (Stankoven and Company, Inc.) 12.8 Relocation; 12.9 Relocation Review	BS, Urban Sociology Years: 29	Licensed Real Estate Broker
 Relocation Specialist responsible for all relo 	cation activities to comply with the Uniform	
 Lynch Road, Evansville, IN Olive Sample Overpass, 	 University Parkway, Evansville, IN US-20 By-Pass Project, Elkhart County, IN 	Church Union Underpass, Mishawaka, IN Indiana-East West Toll Road Project Six Bainta Road, Plainfield, IN
South Bend, IN		 Six Points Road, Plainfield, IN
Constitution of the Consti	Available Resources	
Sharon Varel (Jacobs) Project Controls	BS, Architectural Technology BS, Civil Engineering Technology Years: 23	
system for a \$1 million design project.	uri DOT, St. Louis, MO. Senior Cost Contro	ntrol Engineer responsible for implementing earned value of Engineer responsible for implementing earned value
Todd Embrey (Jacobs) Utility Coordination	MS and BS, Civil Engineering Years: 14	Professional Engineer: IL, MO
design of relocated water main, capital cost Cross County MetroLink, Metro, St. Louis, Metro, Me	estimates and preparation of plans and spo MO. Utility Engineer/Assistant Project Mana rough densely built urban environment. Re	consible for coordination with proposed improvements, ecifications. ger for construction of 8 miles of double track light rail sponsible for all aspects of utility coordination including and preparing relocation drawings and specifications.
Denise Zerillo (Jacobs) Director of Public Involvement Programs	BS, BA/Liberal Arts Years: 30	
I-70 Corridor Second Tier EIS, Montgomery Independent Utility widening and improvem and regional planning officials, as well as th U.S. Route 50 East-Central Corridor Study, conducting all community involvement and	warren, and St. Charles Counties, MO. Pent study, with both an urban and rural land e public, to ensure region-wide acceptance Franklin, Gasconade, and Osage Counties public participation on a 3-county, 70-mile revelopment Study, Henry & Lucas Counties	ublic Involvement Liaison for a 36-mile Section of discape. Primary duty includes regular interaction with local of the improvement plan. s, MO. Public Involvement Coordinator for planning and nighway corridor study and Major Investment Study. ss, OH. Public Involvement Manager for planning and
Victor Modeer (Jacobs) Project Executive	MS and BS, Civil Engineering Years: 21	Professional Engineer: IL, MO
U.S. 67 Expressway, Illinois DOT, Jackson for the upgrade of a two-lane highway to an Illinois Route 29, Illinois DOT – Rochester to mile corridor which includes a new four-lane.	expressway. Evaluated the EIS and final as Taylorville, IL. Oversight Manager for development and associated the EIS and final as a Taylor and EIS and Final associated the EIS and final as a Taylor and EIS and EI	or program development from the EIS through construction alignment, engaged public input and involvement. relopment of a four-lane highway for a \$23.5-million, 18.8-ociated work. Soing a new bridge during the initiation of the Environmenta

Relevant Experience

I-44/US 65 Interchange

Springfield, Missouri



Client
Missouri Department
of Transportation,
District 8
3025 E. Kearney
Springfield, MO
65803

Contact

Ms. Linda Bokel, P.E., Project Manager 417.895.7698

Completion

- → Design Jan. 2006
- Construction Nov. 2007 (est. for Phase 1)

Costs

- Design \$2.9 million
- Construction
 - Preliminary Design (est. of entire project) –
 \$75 million
 - Final Design (est. of Phase 1 portion) –
 \$23 million

Jacobs performed preliminary design and final design services for the reconfiguration of a four-level directional interchange, removal of cloverleaf ramps, and design of flyover ramps. This includes preliminary and final design of roadway, bridges, and retaining walls (structural and MSE), geotechnical reports, tower lighting, traffic simulation, public involvement support, and construction support. The design traffic volume is 63,000 on I-44, and 55,000 on US 65.

We were responsible for advancing MoDOT's conceptual plan of the interchange to preliminary design for the ultimate interchange. This included finalizing the roadway geometrics, developing the bridge memorandums and TS&L drawings and retaining wall preliminary drawings, performing geotechnical investigations and analysis, and developing the preliminary drainage plans. During this phase, we refined the conceptual design, which eliminated three bridges and located most of the bridge piers radially with the bridge. The resultant cost savings allowed MoDOT to move to the next phase of construction without having to raise the programmed cost of the first phase.

Final design included one flyover bridge (northbound US 65 bridge over and to I-44), seven retaining walls, four new ramps, and the approaches to the new US 65 bridge. Bridges are multi-span continuous plate girder with wall type bents founded on pile caps on drilled shafts. Other items associated with final plans include the design of drainage, erosion control, tower lighting, signing including trusses, striping, maintenance of traffic plans, and construction staging. Cost estimates and specifications were also developed.

Geotechnical work included approval of the sounding layout and plans, overseeing soil investigations and report, and the recommendation and design of foundation types. Pavement plans included design of the approach roadways and obliteration of the old pavement.

We performed traffic simulation using VISSIM and SYNCHRO software to determine the best method of handling traffic during construction. These tools allowed the testing of different construction staging alternatives and detour routes so an acceptable level of service is realized.

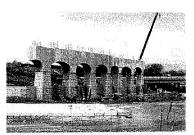
By applying the client's "practical design" philosophy on this interchange reconstruction, we were able to provide enough cost savings that an additional flyover ramp could be accelerated into the initial construction phase of the project.

Accomplishments

- Saved over \$2 million by redesigning original conceptual design
- Eliminated one year of this 3-year project through cost savings for initial construction phase

I-70 over New Florissant Road

St. Louis County, Missouri



Client Missouri Department of Transportation P.O. Box 270 Jefferson City, MO 65102

Contact

Mr. Shyam Gupta, Division Engineer, Bridge 573.751.4676

Completion

- Design Mar. 2000
- ≈ Construction 2004

Costs

- Design
 - Budgeted \$1.5 million
 - Cost \$961,983 (savings of \$488,621)
- * Construction \$10 million

Jacobs was responsible for preliminary layout through final design of four structures associated with this project. These include twin 3-span continuous steel girder structures carrying the opposing traffic lanes of 1-70 over the realigned New Florissant Road, one 4-span continuous steel girder structure carrying a single-lane direct connection exit ramp from westbound 1-70 over the realigned New Florissant Road, and a fourth 2-span steel girder structure with intermediate steel box beam straddle bent carrying the single-lane entrance ramp (Ramp 8) to eastbound 1-70 over the two-lane exit ramp (Ramp 2) from eastbound 1-70.

Preliminary layout and design included alternate span and skew configurations to determine the preferred arrangement. Such designs were detailed enough to verify critical horizontal and vertical clearances and to provide rough quantities to determine approximate construction costs. We designed the entrance/exit ramps and the realigned New Florissant Road as a single-point intersection beneath the I-70 structures.

Since New Florissant Road is a focal point for the northern entrance to the University of Missouri-St. Louis, aesthetics became an important consideration. We provided conceptual design of treatments provided by the State for consideration. Features included haunched girders, precast elements attached to the vertical surfaces of the structures, and special column form treatments.

Work on this project included foundation analyses and selection, as well as an extensive soil-structure interaction analysis of the foundation systems. Based on initial subsurface investigations, the footings of Bent 3 for the North Collector-Distributor Road steel plate girder bridge were designed as spread footings supported

directly on rock. During construction, it was discovered that sound rock was considerably lower than anticipated during design. We redesigned the footings as pile supported, keeping the footing elevation, footing size, and footing reinforcing per plan to avoid further revisions and construction delay. We submitted revised construction documents within one week of receiving the initial information from the owner.

Because of the tight schedule required for completion, MoDOT contacted us about performing the preliminary and final designs for the bridges in this interchange. We were able to negotiate a scope and fee quickly, and received notice to proceed in one month. We delivered preliminary layout through final PS&E packages to MoDOT for four structures well under the typical 18-month delivery for this type of project. Upon review and approval of the preliminary bridge designs and Type, Size and Location drawings, we provided final design of the four structures within 8 months of the 9-month design schedule at approximately 70 percent of the project budget.

The key factors that allowed us to deliver this project below budget and schedule was our thorough understanding of the client requirements and, more importantly, our bridge design knowledge and project management techniques. Early project planning efforts identified that if we finalized the bridge geometry, including substructure layout during preliminary design, we could run superstructure and substructure design tasks nearly parallel for final design. This approach allowed us to begin plan production early. By applying our integrated quality checks/reviews to make sure the plans were developed in a coordinated manner, we reduced review times and minimized late-stage plan changes.

A significant aspect in coordinating this massive effort was that the project budget allowed for a full-time project management effort, which involved constant advanced planning, client and staff coordination, and issue resolution. It is notable that the added project management costs were not appreciable because the schedule was reduced and typical project inefficiencies were minimized by our thorough coordination. We received a 100 percent client satisfaction rating on the project.

All design was performed in accordance with 1996 AASHTO Standard Specifications for Highway Bridges and Interims through 1998.

Accomplishments

- Provided final design a month ahead of schedule at 70% of the project budget
- Reduced review times and minimized late-stage plan changes by applying our integrated quality checks/reviews
- Worked closely with the architectural consultant to implement the conceptual aesthetic enhancements and produce the final design and details

0607-STL-P0106 7 **JACOBS**

I-170/I-270 Interchange Improvements

St. Louis County, Missouri



Client

Missouri Department of Transportation, Dist. 6 1590 Woodlake Drive Chesterfield, MO 63017

Contact

Mr. Bill Schnell, P.E., Area Engineer 314.340.4305

Completion

- Design May 2001
- Construction Mar. 2004

Costs

- Design \$467,000 (preliminary design)
 - \$3,544,000 (final design & construction support)
- Construction
 - Estimated \$38.2 million
 - Actual \$37.5 million

Jacobs performed planning and preliminary and final design for this directional interchange, located in north St. Louis County, which is the northern terminus of I-170. It is also located near three other interchanges along I-270 (Lindbergh, Hanley-Graham and New Florissant). The design traffic volume on I-270 is 141,000 average daily traffic (ADT), and on I-170 it is 69,000.

During the planning phase, we were responsible for developing the Purpose and Need Document, preparing the Design Criteria Memorandum, and developing a Location Study. Four alternative designs were developed and presented to the public at an open house meeting. Comments generated at the public meeting, along with the engineering analysis, assisted in selecting the preferred alternative to address deficiencies of the existing interchange.

Jacobs' specific tasks during the planning phase included route planning, traffic simulation and traffic studies, accident analysis, geometric analysis, feasibility studies, cost estimating and construction scheduling. These efforts were coordinated with MoDOT, who handled the environmental documentation and public involvement.

Our specific tasks during the planning phase included route planning, traffic simulation and traffic studies, accident analysis, geometric analysis, feasibility studies, cost estimating and construction scheduling. These efforts were coordinated with MoDOT, who handled the environmental documentation and public involvement.

Preliminary and final design included seven bridges (including one pedestrian), 1.1 miles of interstate highway, four direction ramps, two outer roads, one arterial roadway, 17 retaining walls (12 mechanical

stabilized earth (MSE) and five cast-in-place), drainage, traffic signals at two intersections, signage, high mast tower and standard highway lighting, and maintenance of traffic plans. All structures were designed in accordance with 1996 AASHTO Standard Specifications for Highway Bridges and Interims through 1999.

Traffic simulation assisted in determining the best method of handling traffic during construction. We used the MITSIM model to analyze traffic impacts along I-270 for construction staging alternatives. An extensive geotechnical investigation was performed to evaluate alternative foundation types and to make foundation recommendations. This work resulted in recommendations of drilled shafts and H-pile supported systems. In addition, we designed a permanent tie-back wall, MSE walls, and CIP concrete walls. Wick drains and an embankment surcharge were employed to accelerate foundation settlements for the Ramp 3 touchdown.

We assisted MoDOT in developing a public involvement campaign during design to keep local communities informed about the project and construction impacts. Meetings were held with local officials to get their input on construction staging alternatives. Through the use of traffic simulation and these public meetings, the construction schedule was reduced from 3 years to 2.

We met the 13-month schedule for final design documents, delivering plans, specifications, quantities, cost estimate and working day study. Special contracting procedures were developed in the specifications to allow the contractor more flexibility with construction operations.

A + B bidding was used so the interstate highway and ramps were not unnecessarily closed and to provide an incentive for the contractor to complete the work quickly. While some connection closings were unavoidable, construction was staged to allow continuous use of I-270 in both directions.

We provided construction phase services, including responding to questions from MoDOT, attending preconstruction meetings, visiting the site during construction, responding to contractor RFIs, and evaluating change orders.

Accomplishments

- Tight control on construction cost resulted in awarded construction bid less than 3% from cost estimate.
- Quality final plans resulted in minimal change orders.
- Innovative resource allocation and bidding cut 1 year off the design schedule.

Route 5 Relocation (Segment from Niangua Arm to South of Camdenton)

Camden County, Missouri



Client

Missouri Department of Transportation, Dist.5 1511 Missouri Boulevard P.O. Box 718 Jefferson City, Missouri 65102

Contact

Mr. Roger Schwartze, District Engineer 573,751,3322

Completion

- Design 2006
- Construction est. 2010

Cocte

- Design \$2.98 million
- Construction
 - Estimated \$80 million (total)
 - Actual \$50 million (Jacobs)

Jacobs was selected to prepare preliminary, right-of-way, and final design plans for relocating 8.2 miles of Route 5 to upgrade the existing facility to a four-lane divided freeway. Existing Route 5 is a winding, two-lane rural highway with substandard horizontal and vertical alignments.

Public attention has been high due to the safety/accident statistics, traffic congestion, limited sight distances, and minimal shoulder widths. Local support for the improvements included business owners, and motorists and was influenced by the Lake of the Ozarks Chamber of Commerce, City of Camdenton, and Camdenton RIII School District.

Special engineering design considerations included a new alignment of Route 5, layout of rural diamond interchanges at three locations, extensive cut and fill earthwork volumes, storm water management network of ditches and culverts, maintenance of traffic during construction, and erosion and sediment control.

We completed preliminary plans (strip map) in 1999 and assisted MoDOT with the public meeting by providing exhibits, interacting with the local stakeholders, and answering property owners' questions. We completed

right-of-way plans in 2001 for nearly 100 parcels and provided MoDOT continued support and right-of-way plan updates during their negotiations with the property owners. Final design plans were subdivided into six individual construction packages.

To facilitate opening the new bridge over the Niangua Arm of the Lake of the Ozarks, we completed the first of the six packages December 2001 (1.5-mile grading, drainage, and bridge package). This early segment was opened to traffic October 2003. Features of this section include over 100 acres of clearing, nearly 2 million cubic yards of rock and soil excavation, over 30,000 square yards of bituminous pavement, 16 cross road culverts, 3,000 feet of guardrail, and 9,200 cubic yards of rock lining for the drainage ditches.

The second construction package was prepared to enable a more efficient and safe method of earthwork operations in later packages. This second construction contract involved designing and building the Route 54 interchange bridge over the new Route 5 to allow the transport of excavated rock and soil material from the north to the south side of Route 54 without disrupting traffic along this busy roadway. Plans were completed January 2003 and the contract awarded for completion July 2004.

The remaining four packages will complete the grading, drainage, and paving of the remaining 7 miles of this section of relocated Route 5 from north of Lake Road 5-84 to Lake Road 5-112. Features of this section include over 400 acres of clearing, nearly 8 million cubic yards of rock and soil excavation, over 30,000 tons of bituminous pavement, over 3 miles of pipe/box culvert length, and almost 40,000 cubic yards of rock lining for the drainage ditches.

We performed design of all roadway items and the Lake Road 5-72 bridge on these construction packages. The completed highway offers spectacular views of this scenic region from as much as 140-foot difference in elevation from the roadway to the valleys below.

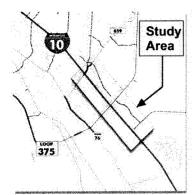
Accomplishments

- Accelerated delivery of first package to accommodate client's desire to open the Niangua bridge to traffic October 2003
- Overall rating 4 out of 5 on recent MoDOT evaluation
- Maintained same design team throughout 4-year contract

0607-STL-P0106 9 **JACOBS**

Loop 375 and IH 10 Corridor Feasibility Study

El Paso, Texas



Client

Texas Department of Transportation El Paso District 13301 Gateway Blvd. West El Paso, TX 79928-5410

Contact

Mr. Gerardo Leos, P.E. 915.790.4200

Completion

- Feasibility Study July 1997
- * IAJS May 1998
- * New Interchange Design September 2001

Costs

- Feasibility Study \$140 million
- * IAJS \$14 million
- * New Interchange Design \$14 million

Project Goals

- Provide a feasibility study for an urban interchange involving Interstate 10, a primary east-west highway, and Loop 375, El Paso's regional beltway surrounding their metropolitan area.
- * Alleviate traffic congestion caused by the proximity of this interchange to a primary U.S. Mexico border crossings and flourishing NAFTA-generated industrial/commercial operations generating causing high truck volumes at this interchange.

Project Description

Beginning with a Corridor Feasibility Study, our successful completion of each project phase has led to the award of each subsequent phase, culminating in final PS&E for the needed roadway expansion.

Feasibility Study on Loop 375 and IH 10 - The project is located in the rapidly growing east El Paso area and involved a 3-mile section of IH-10. The study's scope of work included developing alternatives for improving the traffic flow on Loop 375, which leads to a main port-of-entry to Mexico, by evaluating the need for, and type of, multi-level, fully-directional freeway interchange. The study included the preparation of traffic projections that were accepted by TxDOT's Transportation Planning and Programming (TP&P) Division. The study also assessed the impacts on the community, including traffic, noise, air quality and ecological studies, aesthetic "entry"

concept studies, preliminary design criteria, geotechnical, studies, and cost estimates.

Interstate Access Justification Study (IAJS) - Results of our IH 10/Loop 375 feasibility study illustrated the potential need for an additional interchange to address the existing and projected deficiencies at the Loop 375/IH 10 location. As a result, we prepared an Interstate Access Justification Study (IAJS) for an additional interchange east of the Loop 375 Interchange. The work consisted of developing traffic projections for adjoining and intersecting arterials and then preparing the IAJS for FHWA's review and approval. Once FHWA approval was obtained, we began preparing the environmental assessment and schematic design.

New Interchange Design - We provided design services for 1.2 miles of four eight-lane divided roadways with entrance/exit ramps, one bridge, illumination, ITS, traffic signals, and pavement markings and signage. The project involved designing final PS&E for the new diamond interchange and roadway section involving signalized intersections, hydraulic design, hydrologic studies, signage, pavement markings, drainage system, traffic maintenance, illumination and utility relocations.

Public Involvement

Our efforts include supporting the City and County of El Paso, the communities of Socorro and Horizon City, the Socorro and Ysleta Independent School Districts, the El Paso Community College District, and numerous property owners.

Accomplishments

- Built public support for recommended solution through intense public involvement process.
- Helped District take projects from concept all the way through construction.
- Maintained same staff throughout project.

Key Staff and Project ApproachStaff Qualifications

To meet the specified qualifications of INDOT as well as your diversity goals, we have assembled a team of qualified and experienced firms. Our complete team members' role and the value they bring to this project are demonstrated in the Identification and Qualifications section of this submittal, specifically pages 1 through 4. They will be led by Mr. Bruce Dinkheller, our proposed project manager, who was awarded the Illinois DOT Outstanding Service Award 2000 for his work on the 1-55, Stevenson Expressway reconstruction, and the \$140 million Hillside Interchange project to improve the roadway configuration by adding major safety and traffic enhancements. The design schedule was compressed from three years to 18 months to meet IDOT's schedule.

Firm Capacity and Staff Availability

We commit the resources and talent needed to complete this project in the time you require. Our team is supported by the full resources and capacity of Jacobs Engineering Group, Inc. comprising more than 40,000 personnel, and capable of responding quickly to any unanticipated issues that may arise. Based on your current schedule, our proposed team members are available for this project. Figure 4 contains the current projects under the supervision of our Key Staff.

Figure 4 - Key Staff/Current Projects

Key Staff/Role	Current Projects	Completion Date
Bruce Dinkheller, P.E. Project Manager	Presently 100% available for this project.	
Andrew Frey, P.E. Project Eng./Roadway	Illinois Route 3 Relocation - Sauget to Venice, IL	80% design (on hold)
Steve Yordy, P.E., S.E., Bridge Engineer	Illinois Route 3 Relocation - Sauget to Venice, IL	80% design (on hold)
John McCarthy, AICP Environmental Doc.	I-69 Tier 2 EIS, Sec. 2 – Gibson, Pike, and Daviess Counties, IN	3/2007
Robert Neal Sanders, DGA, PM - ROW Acquisition Services	I-69 Tier 2 Review Sections 1-6, IN	11/2007
	State Road 3 Rush County, IN	12/2006
	State Road 267 Hendricks County, IN	9/2006
	Fayette County Bridge # 45, #81, IN	8/2006
The state of the	City of Indianapolis Sewer Projects	10/2006
Milton Booth Negotiation	City of Indianapolis/Hanna Avenue, IN	8/2006
Todd Embrey, P.E. Utility Coordination	Hwy 40 Water Main Relocation for PWSD#2, St. Louis, MO Kingsmill Crossing Water Main Relocation, O'Fallon, MO	Fall 2006 7/2006

Project Approach

We are Familiar with the Site

We have driven and walked the proposed site. In the absence of being able to review any preliminary engineering studies in preparation of this proposed project, we have identified a series of issues that will potentially define the final configuration of this proposed interchange:

- Each of the four quadrants at this proposed interchange have distinct characteristics that will define the proposed ramp configuration and geometry:
 - The northwest quadrant has an active equestrian stable and residence in direct conflict with any conventional diamond or loop ramp configuration.
 - The northeast quadrant appears to free of any distinct land use conflicts.
 - The southwest quadrant has an existing church.
 There appears to be an established wetland of less than an acre.
 - The southeast quadrant is an inundated wetland of several acres.

Well planned community involvement is necessary to identify appropriate and adequate right-of-way to construct the proposed interchange. There are alternatives to address these existing conditions which include both commercial and residential development.

 In noting the existing and proposed contiguous land use, there is significant potential for increased traffic.

While observing the existing conditions and anticipating further development, future traffic needs to be considered in determining the proposed 109th Street cross-section.

Consideration needs to be given to the proposed 109th Street cross-section with respect to the face to face clearance between the existing I-65 bridge piers. If a four lane cross section is selected to accommodate future traffic, there may be a concern of adequate lateral clearance between the existing piers.

Understanding the Project

The purpose of this project is to prepare contract documents for a new interchange at I-65 over 109th Street in Crown Point, Indiana. The professional services scope includes preparation of the environmental documents, Interchange Access Modification/Justification Study, utility coordination, design plans and specifications, permitting, real estate services and right-of-way acquisition.



The southeast quadrant is an inundated wetland of several acres.

Technical Approach

All preliminary documents that have been prepared for this project will be reviewed and will be incorporated as agreed upon with the Project Manager. Close coordination with the INDOT Project Manager and other internal INDOT resources will be developed and sustained.

It is clear that land acquisition will take a significant amount of time. Early identification of right-of-way needs is critical to sustaining the project schedule. The effort of Project Management for right-of-way acquisition services will be led by Robert Neal Sanders, who has significant experience in this role on other contemporary projects such as I-69 for INDOT. Concurrent with this effort, Project Development and Environmental Documentation will proceed. We will perform initial identification of all existing utilities and contact agencies early in order to effectively communicate their role in this project so that they can plan and schedule work as needed. Our team will make every effort to prepare a quality, complete design that minimizes the need for utility relocation. This philosophy reduces utility relocation delays during construction.

We will review and finalize preliminary vertical and horizontal geometry. A critical element of this project is to sustain traffic at all times and allow adequate access to all properties and businesses during construction. A well thought out staging and Maintenance of Traffic (MOT) plan will be developed. It is noted that the Engineer's Report has already given consideration to this issue. Despite the fact that the final geometry and lane configuration of this project has been identified, the stages during construction that will facilitate the completion are essential. These stages dictate the design of all elements of this project.

As the modifications to the bridges are designed, the MOT plan dictates the final design of the structure. Initially, the existing structure needs to be analyzed to confirm structural adequacy to accommodate traffic during construction. Interim repairs and interim retrofits may be necessary to insure safe use of this structure during staged construction.

The remaining elements of the work will be designed to follow the developed staging plan.

As we do for each of our projects, we will produce a Project Procedures Manual and Project Criteria Document to identify and communicate all project aspects to the project team and to your management team. We will develop a Job Specific Quality Plan (JSQP) to identify all critical project activities, provide check and review requirements for each, and establish a critical path schedule of milestones to set the accountability necessary from our project team members and you. The JSQP is then submitted to your management team for concurrence on the approach to the work before it is initiated. Using a JSQP defines the work to all staff involved in the design process. Our QC/QA Manager Ryan Godbey will check all scheduled submittals prior to submittal to the City of Crown Point.

We understand the importance of communication in successfully completing a project, and use internally developed tools throughout the project's duration. We also use project Task Data Sheets and Issues Forms to identify action items, responsibilities, and completion dates for information requested from you and project staff. These methods promote proactive communication, accountability, and solidify a true partnership between Jacobs, our team members, and you. Prior to submittal to the City of Crown Point, QC/QA reviews of; Environmental Document submittal, Interchange Access Modification, Justification Study, Right-of-Way Plans and permit requests, preliminary, pre-final, and final plans will be performed independent of the established design team.

Cost Containment Practices

We are committed to performing services within your established budget. Our Value Plus process is used on all projects to give the best value to the client, often resulting in significant savings. By working with numerous state DOTs, we have learned to assimilate their practices into our processes.

For example, we incorporated Missouri DOT's Practical Design philosophy into plans already completed for improvements on Route 21 to assist MoDOT in identifying several million dollars in cost savings. Application of practical design on our recently designed US 65/I-44 interchange project in Springfield provided enough cost savings that an additional flyover ramp could be accelerated into the initial construction phase of the project. We realized savings of over \$2 million by redesigning the original conceptual design. Our best practices enable us to deliver your project better, faster, and cheaper.

Furthermore, by using in-house professional cost estimators (not design engineers) and project controls professionals, we can establish and maintain accurate, real-time WBS reports and monitoring capabilities throughout your project.

Innovative Ideas for Delivering this Project

Our resources include former Illinois DOT personnel who share your perspective of developing and delivering similar projects for their constituents:

- Our proposed project executive Vic Modeer served as District Engineer for three districts, Director of Highways, and Chief Engineer of the Department.
- Our proposed project manager Bruce Dinkheller served as District Engineer, Engineer of Project Implementation, Materials Engineer, and Consultant Services Project Manager.
- Our expert on the Project Development Process, Teresa Price, served as Program Development Engineer.

Other Relevant Information

Along with direct INDOT EIS experience, our staff brings familiarity with state DOT Project Development Process, including neighboring Ohio where our environmental and design staff performed on several transportation projects. In addition, we have successfully prepared Interstate Access Justification Studies for FHWA review and approval.

JACOBS

Certified DBE Name & Address

Booth & Associates, LLC,

3833 N Meridian Street #327, Indianapolis, IN 46208

Request for Proposals Bulletin <u>City of Crown Point</u> Project New Interchange Project Development on I-65

Type(s) of Work

12.2 Title Research; 12.6 Negotiations; 12.7 Closing

(3.4% to be subcontracted to Booth & Associates, LLC)

AFFIRMATIVE ACTION CERTIFICATION

I do hereby certify that it is the intention of my company to affirmatively seek out and consider certified DBEs to participate as part of this proposal.

I understand and agree that all subconsulting in connection with this proposal, whether undertaken prior to or subsequent to the notice to proceed will be in accordance with the requirements for the Disadvantaged Business Enterprise Program, included elsewhere in this RFP. I understand and agree that no subcontracting will be approved or commenced until the Department of Transportation has reviewed and approved the affirmative actions taken by my company or me.

I understand that utilization of certified DBEs is in addition to all other equal employment requirements of this RFP.

I acknowledge that this certification is to be made an integral part of this proposal.

I understand and agree that the submission of a blank certification shall cause the proposal to be rejected.

I hereby certify that contact has been made with the certified DBEs listed in this certification. If my company becomes the CONSULTANT, the certified DBEs have tentatively agreed to perform the services. I understand that neither my company nor I will be penalized for amounts achieved over or under the amount shown for voluntary DBE utilization anticipated over the goal. However, INDOT may request an explanation for any variances.

SUBCONSULTANTS

1. ASC Group, Inc. 4620 Indianola, Columbus, OH 43214 5.4 Ecological Surveys; 5.9 Archaeological Investigations; 5.10 History/Architectural Investigations (11.2% to be subcontracted to Infrastructure Engineering, Inc.)

Approximate Percentage Credited toward DBE Goal (RC) 14.6%
Approximate Percentage of Voluntary DBE Work Anticipated over DBE Goal (RN) 9.6%

Name	of Company _	Jacobs Civil Inc.	
By:	Byes	esi)	
Date _	7/21/06	10 10 10 10 10 10 10 10 	
+1	1919-1917-191	Brynne Smith, Vice President, G Individual's Name and T	

2.



STATE OF INDIANA

JOSEPH E. KERNAN, Governor

Department of Administration

MINORITY AND WOMEN'S BUSINESS ENTERPRISES DIVISION

Indiana Government Center South 402 West Washington Street, Room W469 Indianapolis, Indiana 46204-2297 Telephone: (317) 232-3061

August 23, 2004

Shaune M. Skinner, President ASC Group, Inc. 4620 Indianola Ave. Columbus, OH 43214

SUBJECT: Reertification for Disadvantaged and Women Business Enterprise Program

Dear Ms. Skinner:

The Indiana Department of Administration (IDOA), Minority and Women's Business Enterprises Division thanks you for submitting an application for certification as a Disadvantaged/ Women Business Enterprise (D/WBE).

We are pleased to inform you that ASC Group, Inc. is hereby certified as a Disadvantaged and Women Business Enterprise (D/WBE), in accordance with the information submitted and reviewed. This determination is based on information provided to IDOA that indicates your firm provides a commercially useful function in the area(s) of Business Services - NAICS Code 541320 - Consultant-Architectural Services.

This certification is valid through August 31, 2007, inclusive. While the certification is valid for a three-year period, we will request annual updates regarding those issues critical to maintaining your certification.

If the firm should develop the resources, including equipment and personnel, to become involved in other areas and wishes to be certified in those areas, you must notify this office for a determination which may require additional documentation. If the firm no longer has the ability to perform in certain areas or loses its pre-qualification status in certain areas, IDOA must be notified of those changes within seven days of the firm's notification of the same. Failure to do so may result in your firm being removed from eligibility.

Also, location and/or telephone changes, changes in the ownership and/or managerial/operational control of the business shall be reported to IDOA within seven days of the change. Failure to do so may result in your firm being removed from eligibility.

IDOA reserves the right to rescand this certification if any of the following are found to be true: 1) the above requirements are not met; 2) the information upon which the certification is based proves to be false, inaccurate or misleading; 3) other just cause is determined through established investigative procedures.

This certification is not necessarily accepted by other states or agencies and does not validate the capability or capacity of your firm to perform in the area(s) for which you have been certified.

Questions regarding this certification may be addressed to the Indiana Department of Administration, Minority and Women's Business Enterprise Division, at 317/232-3061.

Sincerely

Ronalda R. Minnis

Deputy Commissioner

Indiana Department of Administration

Minority and Women's Business Enterprises Division

RRM: dlp

co: INDOT Supportive Services

File



STATE OF INDIANA

MITCHELL E. DANIELS, JR., Governor

Department of Administration

MINORITY AND WOMEN'S BUSINESS ENTERPRISES DIVISION

Indiana Government Center South 402 West Washington Street, Room W469 Indianapolis, Indiana 46204-2297 Telephone: (317) 232-3061

May 18, 2005

Booth & Associates, Inc. Attn: Milton Booth 3833 North Meridian Street Suite 327 Indianapolis, IN 46208

SUBJECT: Certification for the Minority and Disadvantage Business Enterprise Program

Dear Mr. Booth:

The Indiana Department of Administration (IDOA) thanks you for submitting an application for certification as a Minority and Disadvantage Business Enterprise (D/MBE).

We are pleased to inform you that **Booth & Associates**, Inc. is hereby certified as a Minority and Disadvantaged -owned Business Enterprise (M/DBE), in accordance with the information submitted and reviewed. This determination is based on information provided a commercially useful function in the area(s) of NAICS Code: 531320 - Offices of Real Estate Appraisers and UNSPSC Code(s): 80131802 - Real Estate Appraisal Services and 78101804 - Relocation Services. We have requested that an UNSPSC code be added for Negotiation Services, a service you also provide. We will update your certification if and when this new code becomes available.

This certification is valid through May 31, 2008 inclusive. While the certification is valid for a three-year period, we will request annual updates regarding those issues critical to maintaining your certification.

If the firm should develop the resources, including equipment and personnel, to become involved in other areas and wishes to be certified in those areas, you must notify this office for a determination which may require additional documentation. If the firm no longer has the ability to perform in certain areas or loses its pre-qualification status in certain areas, IDOA must be notified on those changes within seven days of the firm's notification of the same. Failure to do so may result in your firm being removed from eligibility.

Also, location and/or telephone changes, changes in the ownership and/or managerial/operational control of the business shall be reported to IDOA within seven days of the change. Failure to do so may result in your firm being removed from eligibility.

IDOA reserves the right to rescind this certification if any of the following are found to be true: 1) the above requirements are not met; 2) the information upon which the certification is based proves to be false, inaccurate or misleading; 3) other just cause is determined through established investigative procedures.

This certification is not necessarily accepted by other states or agencies and does not validate the capability or capacity of your firm to perform in the area(s) for which you have been certified.

Questions regarding this certification may be addressed to the Indiana Department of Administration, Minority and Women Business Enterprises Division, at 317/232-3061. Thank you.

Sincerely,

Claudia Cummings

Deputy Commissioner

Indiana Department of Administration

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Minority and Women Business Enterprises Division

CC/akb Cc: File

RECYCLED PAPER

Equal Opportunity Employer

Current and Completed Projects

Name of Firm: Jacobs Civil Inc.

from lowest percent of completion to highest.

List all current highway projects assigned to the personnel that would also be working on contract assignments associated with this RFP item, sorted in order **Date:** July 21, 2006

characteristics to those associated with this RFP item. Projects completed under the direction of project managers while employed by other firms may be listed, Also, after the list of current projects, list the same information for representative projects completed within the last five (5) years which have similar if clearly identified as such, and may also be highlighted in resumes' elsewhere in the Lol.

Current

b. Services being provided (ex Survey, Road Design	, Bridge Design, Construction Inspection, etc.)	n, etc.)		Reference Name
a. Transit Oriented District Traffic and Parking Study	Jeremy Wyndham – PM Ali Kazmi – Deputy Project Manager	\$30M	2006.30%	TXDOT, Sanjay Upadhyay
 b. Traffic Analysis, traffic circulation plans, parking study implementation plan 	y, preparing concept design and estimates, and Project Improvements	and Project Imp	rovements	713-802-5302
a. 1H 10 Corridor Traffic Projections – Houston, TX	Steve Shedd – PM Ali Kazmi – Deputy Project Manager	\$225M	2006 50%	TxDOT, Gus Sanchez
b. Development of traffic projections and traffic analysis				915.790.4233
a. IH 45/SH 75 Corridor Traffic Projections - Houston, TX	Jeremy Wyndham – PM Ali Kazmi – Deputy Project Manager Nanditha Togar – Traffic Services Task Leader	\$25M	2006 50%	TxDOT, Sanjay Upadhyay
b. Development of traffic projections and traffic analysis				713.802.5302
a. 1-69 Tier 2 EIS, Sec. 2 – Gibson, Pike, and Daviess Counties, IN	John McCarthy – PM Lars Carlson – Ecologist Ali Kazmi – Traffic Engineer Sharon Varel – Senior Cost Control Engineer	\$300M (constr. est.)	3/2007 (Est. 74%)	Hannum, Wagle & Cline, Randy Hancock
b. Environmental studies; design services to identify alternative alignments, locate interchanges, prepare Engineers Report	native alignments, locate interchanges, pr	pare Engineers	Report	812.752.0914

a. Illinois Route 3 Relocation - Sauget to Venice, IL	Steve Yordy – PM Andrew Frey – Design Engineer Tom Juen – Project Engineer	\$90M (const. est).	80% design (on hold)	IDOT, Mary Lamie
 b. Phase II engineering services for preparing contract pla miles of relocated highway, Final PS&E for 5.7 miles of triple box culver 	lans, special provisions, and estimates for the complete reconstruction of 5.7 of road relocation involving 13 roadway bridges, 4 railroad bridges, and a	idges, 4 railroad	nstruction of 5.7 bridges, and a	618.346.3110
	Steve Shedd PM			
a. Northeast Parkway Route Study	Ali Kazmi – Traffic Task Lead Nanditha Togar – Traffic Services Task Leader	\$225M	2006 95%	TXDOT, Gus Sanchez
h Design orthographic and	- asin Egauci		0.000 - 0.000 - 0.000	
. Cesign scheinathe and environmental assessment				915-790-4233
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a. Route 5 Relocation - Camden County, MO	Dan Morris – PM	\$50M (const. est.)	2006 design 2010 (const.	MoDOT, Roger Schwartze
b. Preliminary, right-of-way, and final design plans for redivided freeway	elocating 8.2 miles of Route 5 to upgrade the existing facility to a four-lane	le existing facilit	y to a four-lane	573.751.3322
a. I-170/I-270 Interchange Improvement - St. Louis	Todd Welz – PM Andrew Frey – Lead Highway			
County, MO	Engineer John Reinfurt – Geotechnical Groun	\$37.5M	2004	MoDOT, Bill Schnell
h Interchange lovent aloneira	Leader			:
simulation, lighting, geotechnical reports, and construction support services	gn of roadways and bridges, final design c tion support services	f retaining walls,	traffic	314.340.4305
	Todd Welz – PM			
a. I-44/US 65 Interchange - Springfield, MO	Andrew Frey – Lead Highway Design Engineer	\$23M		MoDOT Linda
	John Reinfurt – Geotechnical Group Leader	(1 st Phase)	zuuo design	Bokel
b. Preliminary and final design to reconfigure four-level of	direction interchange			417 805 7600
a. I-70 over Florissant Road - St. Louis County, MO	Mike Bauer – PM	Mols	3004	MoDOT, Shyam
h Preliminary layout through find docing 2.8.			1001	Gupta
: : : : : : : : : : : : : : : : : : :	res and single-point interchange below I-70 structures	structures		573.751.4676
a. I-90/94 Kingery-Borman Expressway – South Cook	Bruce Dinkheller - PM	\$110M	2004	Hinois DOT
			-	

JACOBS

and Will Counties, IL*				Cathy Kibble
b. Design staged reconstruction including MOT, pavement, vertical and horizontal geometry, drainage, erosion and sediment control, roadway lighting, and structures plans and specifications	t, vertical and horizontal geometry, drains	ige, erosion and	sediment control,	847.705.4269
a. I-290 from I-294 to 1st Avenue "Hillside Interchange" – Chicago, IL*	Bruce Dinkheller - PM	\$140M	2001	Illinois DOT John Kos
b. Managed construction including building demolition, MOT, staged construction, structures (bridges and retaining walls) drainage, pavement	IOT, staged construction, structures (brid)	ges and retaining	walls) drainage,	630.407.6900
a. I-70 Tier 2 EIS, Section 7 – Montgomery, Warren, and St. Charles Counties, MO	Joe Leindecker – PM John McCarthy – Project Planner	\$2.2M (fees)	2005	MoDOT, Kathryn Harvey
b. EIS for a 40-mile SIU involving mainline widening and reconstructing 13 interchanges, rest areas, and weigh stations	reconstructing 13 interchanges, rest areas	s, and weigh stat	ions	573.751.2876
a. Route 21 Relocation - Hillsboro, MO	Dan Morris – PM	\$36M (all 4 packages)	2005	HNTB, Eric Ploch
b. Prepared post-preliminary, right-of-way, and final desig	gn plans for 3.7 miles, including nine bridges, in less than 2 years	ges, in less than	2 years	314.241.2808
a. I-70 Directional Interchange - downtown St. Louis, MO	Ernie Petzold – PM	\$135 (est)	2004 design	MoDOT, Deanne Miller
b. Preliminary design of roadway (37 alignments, 18 inter-	sections) and bridges (22) as part of proposed river crossing project	sed river crossir	g project	314.877.0118
a. US 40/1-64 Seismic Retrofit - downtown St. Louis, MO	John Finke – PM	\$85M	2003 (REI)	MoDOT, Greg Sunde
b. Seismic evaluation, final design, and construction inspection to retrofit side-by-side & double-deck highway bridge	ction to retrofit side-by-side & double-dec	ck highway bridg	ge	573.522.2560
a. Route 364 Extension - St. Louis and St. Charles counties, MO	Ernie Petzold – PM Steve Yordy – Lead Structural Engineer	\$190M	2003	MoDOT, Stacy McMillian
b. Preliminary and final design of 5-lane dual structures spanning an environmentally sensitive lake and the Missouri River	anning an environmentally sensitive lake	and the Missour	i River	573.526.0250
a. IH 10/Loop 375 Corridor Feasibility Study and Design - El Paso, TX	Steve Shedd – PM	\$14M	2001 design	TxDOT, Gerardo Leos
b. Prepared an Interstate Access Justification Study (IAJS)) approved by FHWA; provided design of 1.2 miles of roadway	1.2 miles of roa	dway	915.790.4200
a. Bridge of the Americas Corridor Simulation Study — El Paso, TX	Shannon Hebb – PM	\$309k (fee)	2001	TxDOT, Gerardo Leos
b. Provided IAJS, EA, and traffic engineering services; up	pdated schematic design per TxDOT and FHWA comments	HWA comment	. 8	915.790.4200

	John McCarthy – PM			
a. New Mississippi River Crossing St Louis MO	Andrew Frey – Lead Highway	(J/ J/ Z)		
On tempo is the control of the contr	Engineer	94.3M (Tee)	7004	IDO1, Mary Lamie
	Tom Juen - Group Leader/Hydrologist			
b. Phase I planning, conceptual engineering, environmental documentation, community involvement	d documentation, community involvement			618 346 3110
	TO THE COURT OF TH	Control of the contro		0110.010.010
minary Development Study, Napoleon to	Joe Leindecker – PM			ODOT Mike
Toledo, OH	Andrew Frey - Roadway Engineer	\$4.6M	2005	I joihel
				1181021
b. Freilminary Development Study, draft and final EIS, pro	preliminary engineering			419 373 4457

*Work performed with previous employer.

Name of Firm: Jacobs Civil Inc.

Contract I-69 Section 2 Second Tier EIS & Engineering Assessment Description:		1
Subconsultant Active Contract Date:	4/14/04	
A. Total or Estimated Contract Amount: \$1,717,515.00 Total Remaining Amount Unbilled:	\$364,121.00	
B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.):	\$364,121.00	
D. Estimated No. of Years to E. Estimated Annualized Contract Balance (C. / D.):	\$364,121.00	
Contract		
Description:		2
Subconsultant Pending Selection Date:		
A. Total or Estimated Contract Amount:		
Total Remaining Amount Unbilled:		
B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.):		
D. Estimated No. of Years to		
E. Estimated Annualized Contract Balance (C. / D.):		
Contract		3
Description:	K	3
		3
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount:		3
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled:		3
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants:		3
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.): D. Estimated No. of Years to		3
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.):		3
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.): D. Estimated No. of Years to		3
Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.): D. Estimated No. of Years to E. Estimated Annualized Contract Balance (C. / D.): Contract Description:		4
Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.): D. Estimated No. of Years to E. Estimated Annualized Contract Balance (C. / D.): Contract		4
Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.): D. Estimated No. of Years to E. Estimated Annualized Contract Balance (C. / D.): Contract Description:		4
Subconsultant		4
Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.): D. Estimated No. of Years to E. Estimated Annualized Contract Balance (C. / D.): Contract Description: Subconsultant Pending Selection Date: A. Total or Estimated Contract Amount: Total Remaining Amount Unbilled: B. Unbilled Amount Expected to be Completed by Subconsultants: C. Net Remaining Amount Unbilled (A. minus B.):		4
Subconsultant		4